

OBJECT ORIENTED FRAMEWORK MECHANISM AND METHOD FOR VIRTUAL DYNAMIC CLONING OF COMPUTER SYSTEMS IN A NETWORK

ABSTRACT OF THE DISCLOSURE

An object oriented framework defines a model computer system that can be used
5 to configure computer systems on a network. The copying of configuration data for the
model computer system to one or more other computer systems is referred to herein as
“cloning.” The model computer system may be defined by a system administrator
specifying configuration data, or by a system administrator selecting one computer system
on the network as the model computer system. The framework may then be used to
10 configure one or more selected computer systems on the network to be similar to the
model computer system in one or more aspects. The framework mechanism of the
invention defines a model class and a system replicator class that are core classes of the
framework, and therefore cannot be modified by a user. The model class defines a model
computer system with one or more aspects that may be configured. The system replicator
15 class allows comparing configuration data from one computer system against the
configuration data for the model computer system, and for updating the configuration
data of one or more computer systems to match the configuration data for the model
computer system. The framework mechanism also includes a user-extensible system
aspect class that allows a user to define concrete subclasses that define aspects of
20 computer systems on the network. Instances of the aspect class or its concrete subclasses
define the configuration data that may be read and updated on computer systems on the
network.